

### **DETAILED ACTION**

Claim 10,18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 10, “blower” is not consistent with claim 1’s “multiple” blower system.

As to claim 18, aren’t the “a temperature sensor”, “a blower system” and “a temperature controller” those already claimed in claim 1? It appears that the same structure is being claimed twice.

Claims 19,20,21,22,23,24,25,26,27,28,29,30,31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomiita et al.

Tomiita teaches (Figure 1) an apparatus, including: test chamber; xenon lamp 1; dispenser 13 for corrosive acid (sulphuric acid) for use of the dispenser for “10 seconds” (Para 4, line 50); and specimen 6 support 7.

As to claims 19,20,22,24,25,28,29,31, the sample is “dried” (col. 5, line 10), and steps are carried out “cyclically” (col. 5, line 21), suggestive of “controlled” drying by either manual operation or use of a computer that will allow for automation to conserve human resources of what is otherwise carried out manually.

As to claim 21, effective “cleaning agents” (col. 3, lines 63-64) include those that employ water.

As to claim 23, the steps are carried out “cyclically”.

As to claims 26, 27, the blower and damper will influence the temperatures during drying.

As to claim 30, the testing is carried out “cyclically”, and the device simulates “natural conditions”.

As to **REMARKS**, consider:

As to p. 9, last paragraph; the sample 6 is "held" (col. 4, line 28) on the holder, and the matter is removed ("removing", col. 4, line 40); "*Then*" (italics added, col. 4, line 44) the holder (along with the sample 6) is “horizontally” (col. 4, line 45) positioned and the pump *sprays* 5% NaCl solution to the holder. It is that spray that forms drops of NaCl solution on the sample.

Claims 1,3,5,6,8,9,10,11,13,15,16,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tikhtman et al in view of Suga '701.

Tikhtman teaches a weather machine including: chamber; lamp 40; upper most dispenser 53; processor 38 to control the spray 53 unit (col. 9, lines 23-24); specimen support; black temperature sensor to control blower (col. 8, lines 31-36); and an additional temperature sensor 41 connected to the same processor 38 (col. 8, lines 21-21).

Tikhtman does not teach multiple blowers.

As to claims 1,5,6,9,10,11,13,16,18, Suga teaches use of a blower 21 (i.e. second blower) to cool lamps in weather chambers.

As to claim 3, Tikhtman teaches humidity sensor 43 that sends a signal to the processor 43 to control spray 52. (col. 9, lines 8-22)

As to claim 8, the heater 30 is controlled by the microprocessor, as a function of damper position, which is a function of the temperature sensor. (col. 8, lines 9-19)

As to claim 15, note dispensers 52,53.

Claims 2,4,14,17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tikhtman et al in view of Suga '701, as applied to claim 1, and further in view of Tomiita et al '636.

As to claims 2,4,17, Tomiita teaches simulation of natural conditions at seashore of offshore, and controls the lamp for time periods ("6 to 18 hours", col. 4) accordingly.

As to claim 14, "natural conditions" suggest cycling, from day to day.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tikhtman et al in view of Suga '701 as applied to claim 1 above, and further in view of Rathod et al or Grossman et al '591.

As to claim 7, either (1) Rathod teaches (Para 5) sensing output of lamps to control irradiance output of a weathering apparatus, suggestive of such control in Mita, or (2) Grossman et al teach (Figure 2) use of an irradiance controller for a weathering apparatus, suggestive of such control in Mita.

Claims 35,36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tikhtman et al in view of Suga '701, and further in view of Tomiita et al '636, and further in view of Mita et al 681.

Comments that exist above regarding claim 2 similarly apply here.

As to claims 35,36, it would have been obvious to employ "corrosive" (col. 1, line 51) "seawater" (col. 1, line 53) water to weather test materials in Tikhtman as Mita teaches that materials benefit from such testing.

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 5:30am to 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on 571-272-2205. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Robert R. Raevis/

Primary Examiner, Art Unit 2856